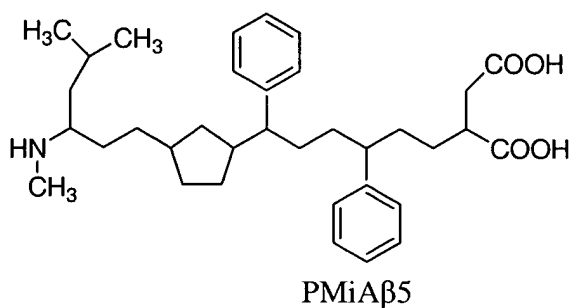


## ABSTRACT

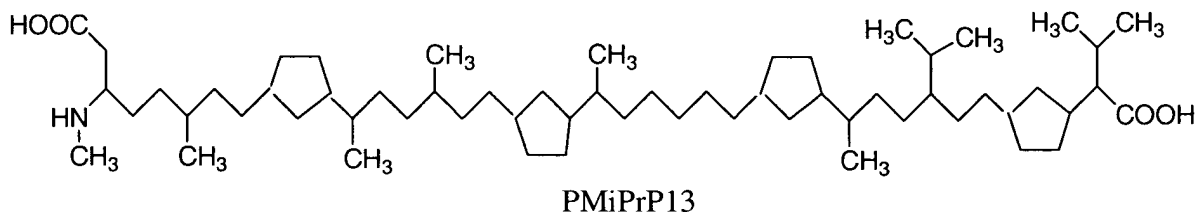
The present invention is an inhibitory peptide capable of inhibiting  $\beta$  pleated sheet formation in amyloid  $\beta$ -peptide. The inhibitory peptide is a  $\beta$ sheet breaker peptide analog designed by chemical modification of a  $\beta$ sheet breaker peptide capable of inhibiting  $\beta$  pleated sheet formation in amyloid  $\beta$ -peptide.

The present invention also includes an inhibitory peptide capable of inhibiting conformational changes in prion PrP protein associated with amyloidosis. The inhibitory peptide being a  $\beta$ sheet breaker peptide analog designed by chemical modification of a  $\beta$ sheet breaker peptide capable inhibiting the conformational changes in prior PrP protein associated with amyloidosis.

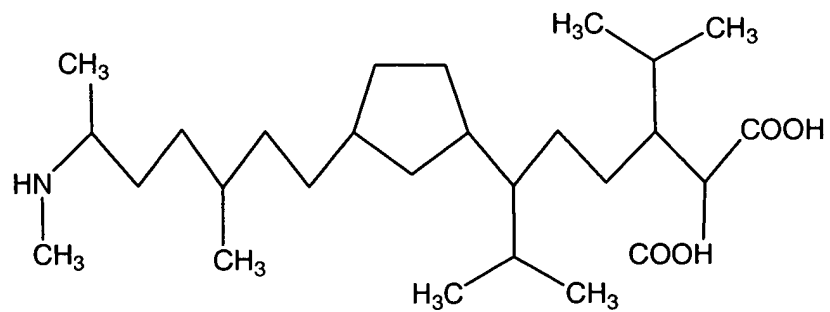
In addition, the present invention includes a peptide mimetic with the following structure:



In another embodiment, the peptide mimetic has the following structure:



In yet another embodiment, the peptide mimetic has the following structure:



PMiPrP5